

CLAIMS

1. A prepreg comprising a base part, said base part comprising fibers and a matrix, said matrix being at least partially uncured, characterized in that it further comprises at least one surface part consisting essentially of bioactive filler material, said bioactive
5 filler material being in particle form and at least partially and at most partially embedded in said base part.
2. A prepreg according to claim 1, characterized in that said bioactive filler material is selected from the group consisting of bioactive glass, silica gel, titanium gel, silica xerogel, silica aerogel, natrium silica glass, bioactive glass ionomer,
10 hydroxyapatite, Ca/P-doped silica gel and mixtures thereof.
3. Prepreg according to claim 1 or 2, characterized in that said fibers are selected from the group consisting of inert glass fibers, bioactive glass fibers, silica fibers, quartz fibers, ceramic fibers, carbon/graphite fibers, aramid fibers, ceramic fibers, poly(p-phenylene-2,6-benzobisoxazole) fibers, poly(2,6-diimidazo(4,5-b4',5'-
15 e)pyridinylene-1,4(2,5-dihydro)phenylene fibers, polyolefin fibers, fibers prepared from copolymers of olefins, polyester fibers, polyamide fibers, polyacrylic fibers, sol-gel processed silica fibers, collagen fibers, cellulose fibers, modified cellulose fibers and mixtures thereof.
4. Prepreg according to any of the preceding claims, characterized in that said
20 fibers are in the form that are selected from the group consisting of continuous fibers, chopped fibers, mat, sheet or mixtures thereof, and in that they are oriented in one, two, three or four directions, randomly or mixtures thereof.
5. Prepreg according to any of the preceding claims, characterized in that said matrix is selected from the group consisting of triethylene glycol dimethacrylate, 2,2-bis(4-(2-hydroxy-3-methacryloxy)phenyl)propane, polymethyl methacrylate, methyl
25 methacrylate, hydroxyethyl methacrylate, urethan dimethacrylate, starburst methacrylated polyesters, hyperbranched methacrylated polyesters, polyvinyl chloride, polyetherketone, polylactides, ϵ -caprolactone, poly-OH-proline and mixtures thereof.
6. Prepreg according to any of the preceding claims, characterized in that it is X-ray opaque.
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7. A composite obtainable by curing the prepreg according to any of the claims 1-6.
8. A mineralizing sheet for treatment of hypersensitive teeth, characterized in that it consists essentially of a supporting sheet having two opposing faces, a first of said
5 faces being at least partially covered by a prepreg according to any of the claims 1-6 or by a composite according to claim 7.
9. A prepreg according to any of the claims 1-6 for use as treatment material for hypersensitive teeth, basement filling material for tooth restorations, root canal posts, cores of dental crowns, clasps, retainers of removable dentures, tooth mineralizing
10 splints, occlusal splints, cervical splints, replacement of bones, support of the bone fractures, bone fillings, tissue guiding materials and coatings of implants.
10. Use of a prepreg according to any of the claims 1-6 for the manufacturing of a dental restoration, temporary or permanent root canal filling, root canal post, a dental crown, a retainer for removable denture, a tooth mineralizing splint, an occlusal
15 splint, a cervical splint, a clasp and a coated implant.
11. Use of a prepreg according to any of the claims 1-6 in dental and medical applications.
12. Use according to claim 11, characterized in that said use is for treatment material for hypersensitive teeth, basement filling material for tooth restorations,
20 temporary or permanent root canal filling, root canal posts, cores of dental crowns, clasps, retainers of removable dentures, tooth mineralizing splints, occlusal splints, cervical splints, replacement of bones, support of the bone fractures, bone fillings, tissue guiding materials and coatings of implants.